SC READY Data Review Report Grade 8

On November 18, 2016 the South Carolina Department of Education convened a panel of experts to review item data on SC READY. The panel looked at items with a high percentage of students answering correctly and items with a low percentage of students answering correctly. The discussions of that panel yielded the following recommendations.

Areas where eighth grade students are doing well include the following standards:

- 8.F.1.c
- 8.F.5.a
- 8.GM.2

Teachers must keep up the rigor on these standards, and at the same time, work hard to improve performance on standards that did not test as well.

Standards of concern:

- 8.F.3
- 8.EEI.1
- 8.GM.9
- 8.DSP.3.c
- 8.DSP.4.b

The panel recognizes the hard work of SC educators and offers the following as suggestions for ways to improve student success on SC READY.

- Give problems with real-world situations. Since many of the test items have some sort of context, there are not many non-contextual math problems.
- Have students work on grade-level appropriate problems where the result of an operation is given. This may be a sum, difference, product, or quotient. Then the student must find a missing addend, subtrahend, minuend, factor, dividend, or divisor. Students should also be able to solve these types of problems in a real-world context.
- Give students an opportunity to experience a long assessment in a single sitting at least once before taking SC READY.
- Provide students with practice using and creating two-way tables to interpret data and compute relative frequencies.
- Include finding relative frequencies of conditional probabilities when using a two-way table.
- Present students with practice using functions where they are given an element of the domain and must find the corresponding element in the range. Pay particular attention to problems that give an element of the range and ask for the corresponding element of the domain.
- Ensure that students understand linear functions have a constant rate of change. Work with students to identify functions from tables and graphs. Have students plot the points from the tables if they need a visual representation.
- Furnish students with experiential learning and allow them to generalize rules when working with rigid transformations and congruence.

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- Confirm that students know the formulas for solids referenced in the standards. In particular, students should know the volume of a cone, cylinder, and sphere.
 Begin teaching exponents with 3² or 4² to avoid common misconceptions that occur
- when one starts with 2^2 .
- Allow time for students to practice items with exponents involving multiple steps and/or different bases in the same problem.